

IN THE CLAIMS

Please amend the claims as follows:

1. (original) A method of modelling a state machine, comprising detecting if, from a state, an event gives rise to non-determinism and, if it does, generating a world for at least some of the permutations, and processing the event in each of the worlds.
2. (original) A method as claimed in claim 1, comprising, following processing of the event, identifying identical worlds and disregarding all except one of the identical worlds.
3. (currently amended) A method as claimed in either preceding ~~claim~~claim 1, further comprising processing a further event in all of the extant worlds.
4. (currently amended) A method as claimed in any preceding ~~claim~~claim 1, in which the generating step comprises permuting or taking a selection of permutations of set-actions.
5. (currently amended) A method as claimed in any preceding ~~claim~~claim 1, in which the generating step comprises permuting or

taking a selection of permutations of set-meta-events.

6. (currently amended) A method as claimed in ~~any preceding~~ ~~claim~~ claim 1, comprising receiving a request for information on the state model from an external program, and responding to the request with the requested information.
7. (currently amended) A method as claimed in ~~any preceding~~ ~~claim~~ claim 1, comprising receiving an instruction to process an event, and processing the event in response thereto.
8. (currently amended) A method as claimed in ~~any preceding~~ ~~claim~~ claim 1, comprising receiving an instruction to eliminate a world for each of one or more non-deterministic branches, and in response thereto eliminating the specified world or worlds.
9. (currently amended) A method as claimed in ~~any preceding~~ ~~claim~~ claim 1, comprising receiving an instruction to refrain from generating a world for one or more non-deterministic branches, and in response thereto refraining from generating the specified branch or branches.
10. (currently amended) A computer program containing

instructions for a computer to carry out the method of ~~any of~~  
~~claims 1 to 9~~ claim 1.

11. (original) A computer programmed with the computer program of  
claim 10.

12. (original) Apparatus for modelling a state machine, the  
apparatus comprising means for detecting if, from a state, an event  
gives rise to non-determinism and, means responsive to a positive  
determination for generating a world for at least some of the  
permutations, and means for processing the event in each of the  
worlds.

13. (original) Apparatus as claimed in claim 12, comprising means  
arranged following processing of the event for identifying  
identical worlds and for disregarding all except one of the  
identical worlds.

14. (currently amended) Apparatus as claimed in claim 12 ~~or claim~~  
13, comprising means for processing a further event in all of the  
extant worlds.

15. (currently amended) Apparatus as claimed in ~~any of claims 12~~

~~to 14~~claim 12, in which the world generating means comprises means for permuting or taking a selection of permutations of set-actions.

16. (currently amended) Apparatus as claimed in ~~any of claims 12~~  
~~to 15~~claim 12, in which the world generating means comprises means for permuting or taking a selection of permutations of set-meta-events.

17. (currently amended) Apparatus as claimed in ~~any of claims 12~~  
~~to 16~~claim 12, comprising means for responding to a request from an external program for information on the state model with the requested information.

18. (currently amended) Apparatus as claimed in ~~any of claims 12~~  
~~to 17~~claim 12, comprising means responsive to an event-processing instruction for processing an event.